Amendments to the Specification:

Please replace paragraph [0044] with the following amended paragraph:

[0044] A bias ~~vector~~ module 426 can be coupled to another input to the summer 424. The bias ~~vector~~ module 426 can be configured to provide a vector or a scalar bias value to the summer. The summed output can be coupled to a transfer function module 428.

Please replace paragraph [0057] with the following amended paragraph:

[0057] The method 600 begins at block 600 where an engineer or other system designer determines one or more input parameters. For example, in an artificial neural network used to predict flutter speeds and flutter frequencies for a lifting surface that was changed by repairs or modifications, it may be assumed that the stiffness of the surface has not changed. Thus, the mass and locations of the mass may be the parameters that are accounted for in the analysis. The input parameters may be further constrained such that the initial assumption that the change does not affect stiffness remains accurate. In one embodiment, the locations of the repairs or modifications were constrained to the locations illustrated in the structural model of Figure 2. Additionally, the repair or modification weights were constrained to no greater than a maximum weight of 10% of the total weight of the structure. In an example where the structure is an aircraft stabilator weighing three hundred pounds, the weights of the repairs are constrained to not exceed thirty pounds.